



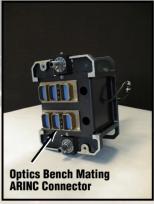
## **Science Diagnostics**

- Seven diagnostic packages are under development:
  - High Bit Depth/Multispectral Imaging Package (HiBMs)
  - High Frame Rate/High Resolution
  - Color Camera
  - Low Light Level (2 units)
  - Mid-IR Camera
  - Illumination Package
- Digital imaging systems are used where feasible to collect and store data of the highest possible fidelity
- Real time processing techniques are used for closed loop operational control
- Images are stored on high density disk drives for later downlink
- The packages are being designed for performance and technology upgrades
- Particle Image Velocimetry (PIV), Schlieren, interferometry and long range IR are all growth candidates which are presently envisioned
- Additional diagnostics provided by PI-hardware

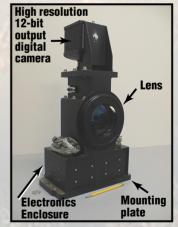
## **Science Diagnostics Modular Camera Bracket**



Side View/Latch



**Bottom View** 



High Bit Depth/Multi-Spectral Imaging Diagnostics Package